a) introducing into cells of the graft from the mammal an effective amount of at least one nucleic acid encoding at least one of the following agents: endothelial cell protein C receptor (EPCR), thrombomodulin, NF-κB inhibitor ; or a functional fragment thereof,

b) expressing the agent in the cells; and

c) increasing the APC sufficient to treat the graft, provided that when the agent is thrombomodulin, the nucleic acid further encodes at least one of endothelial cell protein C receptor (EPCR), the NF-κB inhibitor; or a functional fragment thereof, and step a) of the method is performed *ex vivo* or by direct injection into the graft.

3. (Amended) The method of claim 1, wherein the method further comprises transplanting the treated graft into the mammal.

4. (Amended) The method of claim 1, wherein prior to step a) of the method, the graft is transplanted into the mammal.

6. (Amended) The method of claim 3, wherein the transplanted vascular graft has sufficient APC activation as determined by a standard protein C assay to prevent or treat the early graft failure.

8. The method of claim 6, wherein the level of protein C activation as determined by a standard protein C detection assay of the treated graft is at least about one order of magnitude higher than a control vessel.

9. The method of claim 6, wherein the increased protein C level of the treated vascular graft is detectable for at least about a week.

24. (Amended) A method for engineering a vascular graft of a mammal to resist early failure, the method comprising:

a) introducing into cells of the graft from the mammal an effective amount of at least one nucleic acid encoding at least one of the following agents: endothelial cell protein C receptor (EPCR), thrombomodulin, NF-κB inhibitor; or a functional fragment thereof,

b) expressing the agent in the cells; and

c) increasing the APC in the graft sufficient to resist graft failure,

provided that when the encoded agent is thrombomodulin, the nucleic acid further encodes at least one of endothelial cell protein C receptor (EPCR), NF-κB inhibitor; or a functional fragment thereof, and step a) of the method is performed *ex vivo* or by direct injection into the blood vessel.

REMARKS

Claims 7 and 12 have been canceled without prejudice or disclaimer of any subject matter. The right to file subsequent applications encompassing that subject matter is reserved.

Support for the amendments to claims 1, 3, 4, 6, 8, 9 and 24 can be found throughout the instant application including the Drawings and claims as originally filed.

For instance, particular support for reciting prevention or treatment of a mammal graft to resist early failure can be found at pgs. 10-11, bridging paragraph. See also pg. 16, lines 23-31.

Specific support for addition of the proviso to claims 1 and 24 in which the featured nucleic acid further encode at least one of endothelial cell protein C receptor (EPCR), NF-κB inhibitor; or a functional fragment thereof, when the agent is